

PHENIX WEEKLY PLANNING



1/22/2009
Don Lynch

IR Configuration for remainder of shutdown

TECHNICAL SUPPORT 9002

October November December January

5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25

Run Position 10/20 - 10/31
(CM & MMS moved north WC west)

<DONE>

Station 1 south access 11/3-12/12
(MMS moved south WC west)

<DONE>

Station 1 north access 12/15-12/31
(CM moved south, WC west)

<DONE>

East Carriage Install 1/2-1/15
(CM moved north, EC & WC opt.)

< Done >

Run Position 1/16-1/19
(MMS moved north, EC & WC opt)

< Done >

Ready for run 9 1/19-2/1
(MuID Collars Installed, EC & WC opt.)

< Done >

January 2009

TECHNICAL SUPPORT 2009

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
• IR Prep																															
• C-A carpenters fold EC platforms																															
• Move MuID collars to IR																															
• Remove Plates, cart & move Manlift																															
• Disconnect EC shutdown connections																															
• Roll in-to IR and North to run pos.																															
• PHENIX techs reconnect water, elect., gas, fibers																															
• C-A Carpenters restore EC platforms, re-install lift & ladder																															
• Move MMS North to run pos.																															
• Install MuID collars																															
• Magnet Tests (MMN & CMI)																															
• re-connect gas sniffers																															
• Mike Rau re-install lift wiring, Re-connect TOF blower																															
• Magnet Tests (MMS and CMO)																															
• DC East & West repairs																															
• Blue Sheet/Pink sheets/White Sheets																															
• Pre-run Commissioning																															
• Assemble shield wall (1/26-1/29)																															
• Start watch shifts (1/27)																															
• Start of Run Party /Shield wall roll in (1/30)																															
• Start of Run 9 (Cooldown) (2/1)																															



1/22/2009

Other On going Tasks

Fan Tray Maintenance (fill in)

RPC3 Prototype install (11/15-1/31)
(Remaining tasks: run HV, signal and gas lines.)

RPC Factory Support (continuing)

Dark Current test stand

Storage Racks with humid. Cntrl

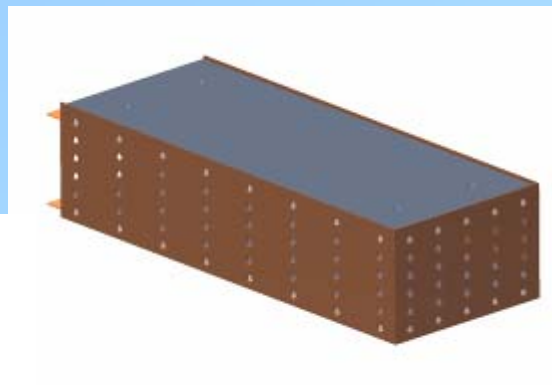
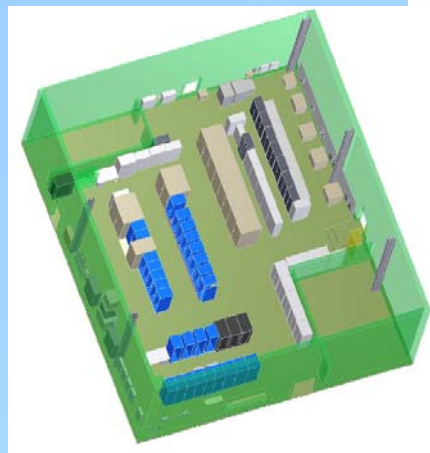
Burn-in test stand

Tilt & Elevating transport table

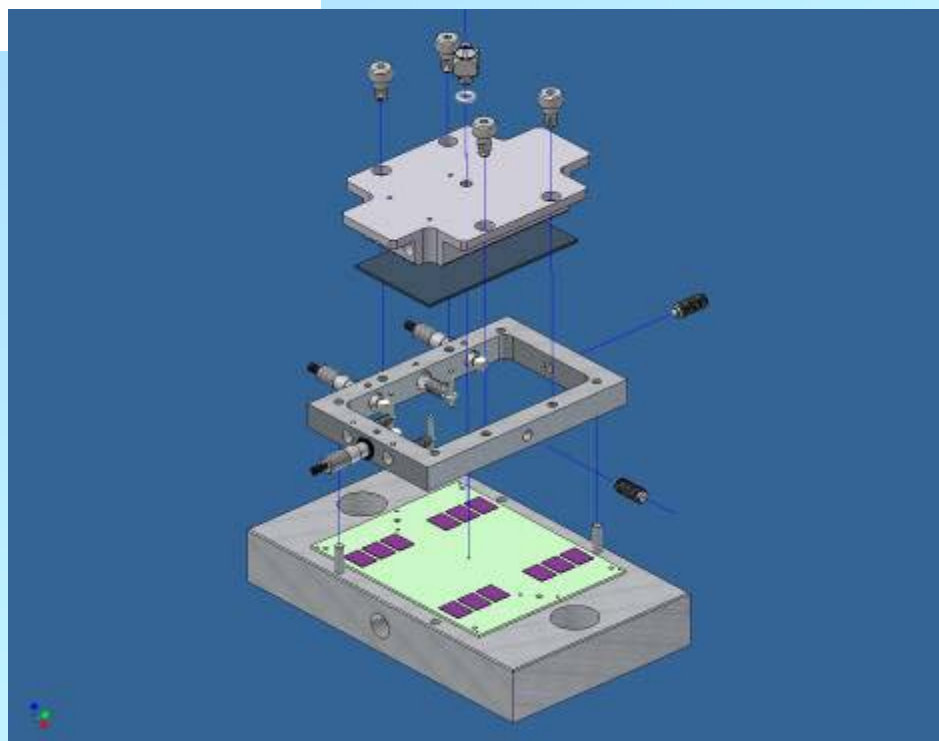
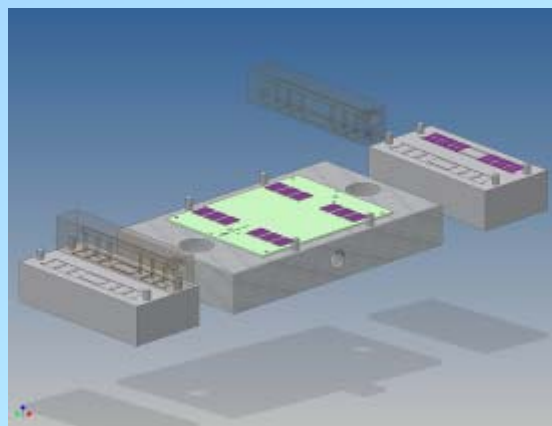
Prep for 2009 Shutdown
(as time permits)



'09 Technical Support



Rack room electronics, etc.
NCC prototype design support
VTX fabrication tooling design
VTX installation design
FVTX design/engineering support



- Walk down PHENIX Electrical Distribution Panels/Breakers and update changes on the electrical one-line drawings. *Complete by 1/31.*
- Install power and signal cable tray (ceiling suspended) for new DCM rack row north of existing DCM racks. *To Be Scheduled*
- Assist in signal and LV cable installation for MuTr/RPC upgrades as necessary. *In Progress*

The following items are Lower priority; not required for run 9, to be scheduled when manpower available and operations & projects inconvenience are minimized

- Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
- Remove existing 15KVA transformer and install 45KVA unit.

UPDATE Needed

Here is a list of the important items required to be completed E&FI:

- **PHENIX Notifier Fire Alarm System** - Tie in two wire communication network cable into the five (5) new racks (IR Muon Trigger racks North & South, 2 Rack Room Muon Trigger racks, Tunnel rack for RPC. Program the fire alarm panel to recognize these new racks). Frank & Paul- **IN PROGRESS - Expected completion after East Carriage is in place.**
- **Energize the HBD heater and temperature monitor system** - Re-test & verify heater control and pre-amp temperature readout points for HBD East and West. Frank, Paul & Mike Lenz-one day. **Pre-amp temp point readout is functioning. Heaters not energized. Need authorization from HBD Group to test heaters.**
- **Connect the Remote Monitor & Control (RMC - ADAM System) communication cable** into the five new racks. Pre-test control and readout functions for these racks prior to "PINK" sheet testing. Frank & Steve Boose- **IN PROGRESS Expected completion after East Carriage is in place.**
- **Perform a full "dry" run of all SMCS logic actions** prior to performance of the CAD witnessed "BLUE" sheet test. Frank & Paul-two days. **Start pre-test next week. Need East Carriage installed.**

Lower priority

- **Troubleshoot and repair Muon Trigger optical data cables.** **Not complete.**
- **Install and test temperature and flow interlock instruments** for protection of the new **Control Room Duct Heater.** **Temperature interlock not required until summer. Vendor flow interlock is functional. Heater is now in service. Temporary heater should remain as backup for next few weeks.**

RPC:

Done:

- Signal cable spools arrived and were cut to 75' lengths to be terminated at one end for installation.
- The first bundle of 12 (of 48) fibers are installed in the SRPC1 patch bay and a patch bay in the DCM rack end.
- Ethernet-fiber link is installed in SRPC1 with a 4 port switch.

To Do:

- The signal cables will be installed and then trimmed to required length and terminated at opposite end (Frank).
- Need to install the Equinox terminal server (Steve or Frank).
- Add ADAM TC modules to read out thermocouples?
- Add the Global Shutdown line to the MegaPAC from the ADAM in SRPC1 (Frank).

HBD Hall Sensors:

Done:

- Hall sensor host boards are complete.

To Do:

- Sal is building the magnet sensor control box today. This is a 2U rack box that will be mounted above HV crate in CMT2.
- Calibrate the probes in Instrumentation.
- Produce 12 hall sensor cables.
- Install magnet sensor control box and ADAM modules in CMT1 for readout.

Tunnel Scintillators/Scalers:

Done:

- G-link breakout CPLD logic is modified for clocks.

To Do:

- Frank is gathering short Lemo cables we need.
- Locate necessary blue logic?
- Test the system, take it apart and rebuild in short open rack in tunnel.

HBD Relays:

To Do:

- We need to move the DIN rail supplies in the HV Protection rack to CMT1 (HBD HV Rack) as per request of the safety committee.
- Relay box code change to gang channel trips.

1009 Building Maintenance Issues

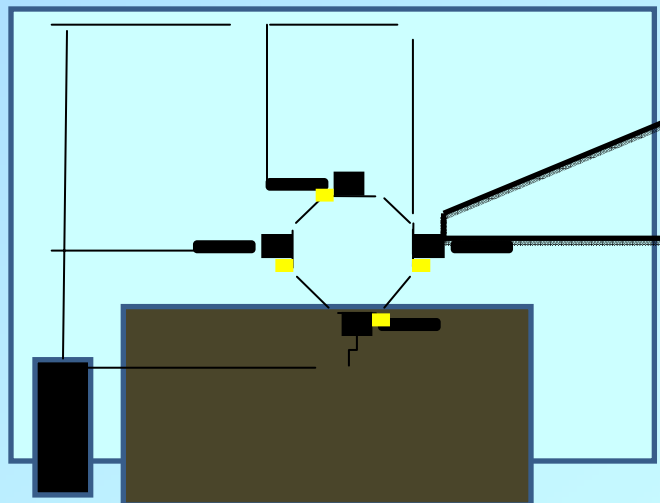
- Roof leak in utility bathroom at northwest corner behind tech offices.
- Roof leak over door between rack room and assembly hall.
- Trailer bathroom slop sink (for Custodians).
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- New duct heater (This item is in progress and should be completed soon)
- Improved Rack Room AC performance (This item has been addressed time and again but unsatisfactorily. Currently the AC fails periodically and is repaired only to fail again. On-condition maintenance is not adequate...an engineered solution is needed.)



RPC3 Prototype Installation



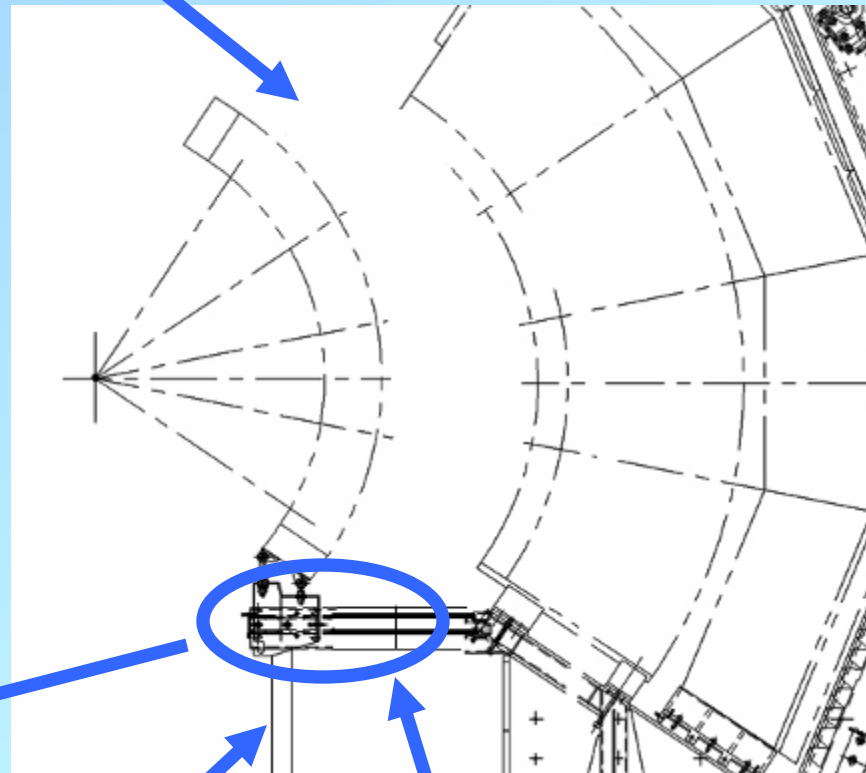
RPC3 Prototype scintillators



PC1 East Broken Wire Repair

Repairs to be performed during '09 Shutdown

Access to PC1 is adequate to remove and replace module



New Column Supports Under railway extensions

New Railway extensions will allow DC to be pulled out ~ 3 feet more



Commissioning Underway

RPC Factory Change in Scope

Received Minutes & Action Items:

Factory work permit revised draft submitted for review.

Revision to Gas Ops - Rob

Revision to HV & LV Ops - Paul

Revision to safety system checkout - Paul

Revision to assembly and test plan - Don

Revision to $\frac{1}{2}$ octant, module & gap storage plan - Don

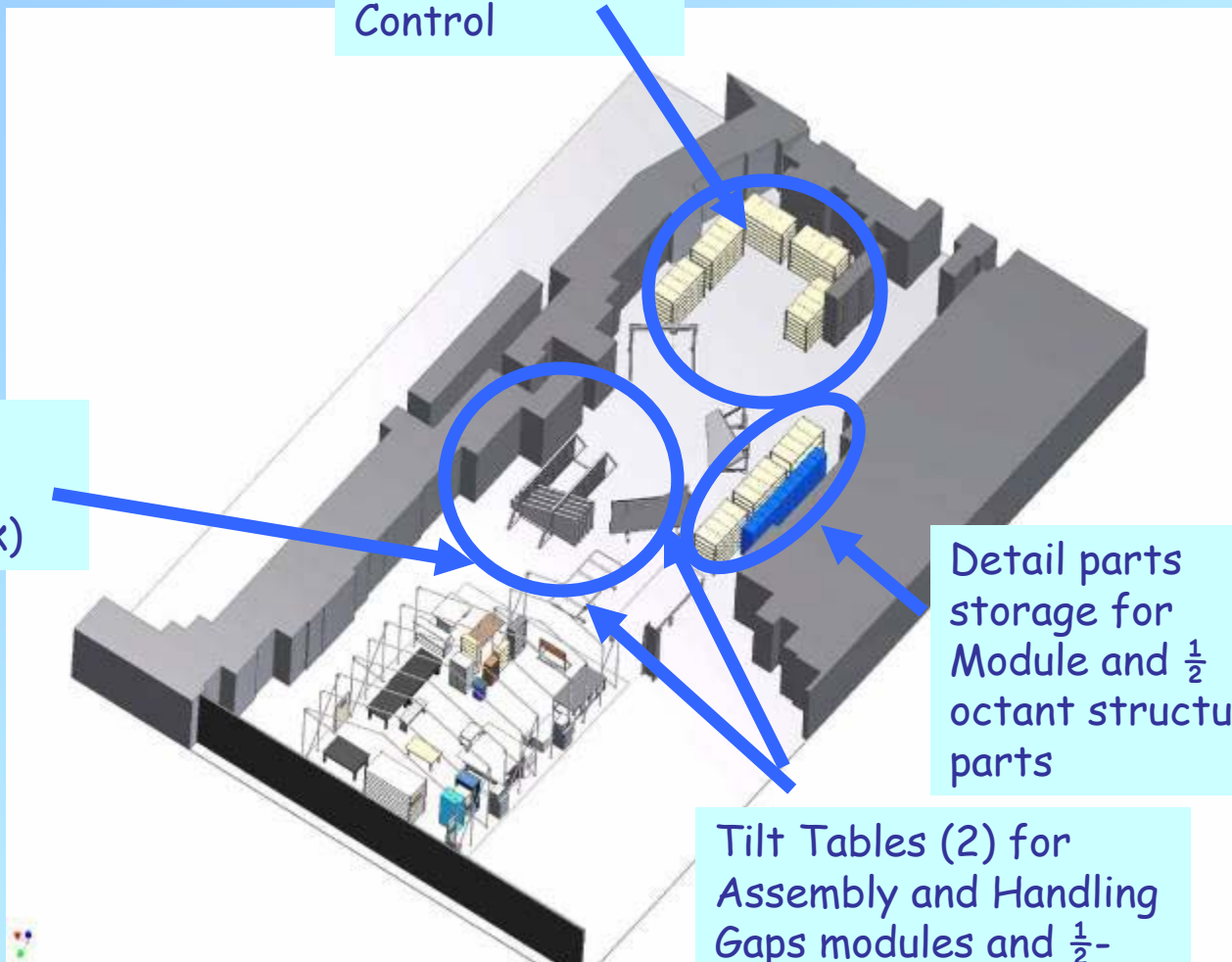
RPC Factory

Burn-in
test stand
(bicycle rack)

Module and Gap
Storage with
humidity
Control

Detail parts
storage for
Module and $\frac{1}{2}$
octant structural
parts

Tilt Tables (2) for
Assembly and Handling
Gaps modules and $\frac{1}{2}$ -
octants

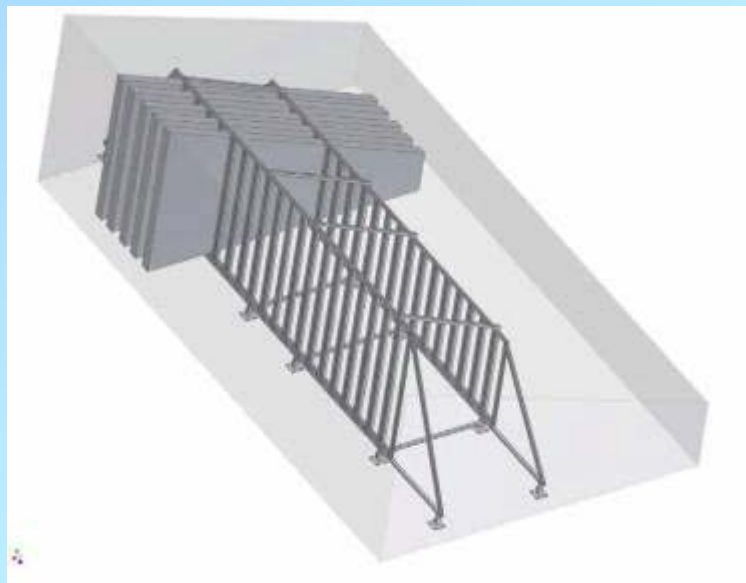


Dark Current Test Stand under construction



Also working on:

- a burn-in test stand for $\frac{1}{2}$ octants



- additional storage for gaps modules and structural detail parts
- transport table/cart

Shutdown '09 Major tasks (expect 5 month shutdown):

- 2009 shutdown Begins April 10, or July 1, 2009 or July 15 or ?????
- End run, remove wall, MuID collars down, EC to AH (3 weeks)
- Install Station 1 South scaffolding (1 week)
- Install Station 2/3 scaffolding (2 weeks)
- PC1 East repair (4 weeks)
- Install stations 1, 2 and 3 south MuTrigger FEE's (12 weeks)
- MuTr decapacitations: station 3 south (3 weeks)
- RPC Station 3 North (12 weeks)
- Prep for future upgrades/existing equipment maintenance & Repair (as necessary)

1. New ODH1 Rules for RHIC tunnel
TQ-ODH1
Practical POM and Escape Pack training
OMC Form filled out

2. Escape Packs and POM's + Training required starting Feb. 1 for tunnel access.



Right



Wrong

3. Always wear head protection when cranes are in use overhead



Right

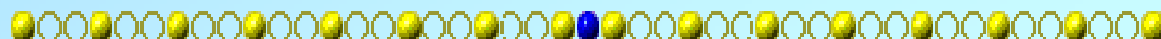


Wrong

Where To Find PHENIX Engineering Info



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm